REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 11-19 and 21-23 are in the case.

I. CLAIM OBJECTIONS

Claim 20 has been canceled without prejudice. Withdrawal of the claim objections is respectfully requested.

II. THE 35 U.S.C. §112, SECOND PARAGRAPH, REJECTION

Claim 11 stands rejected under 35 §U.S.C. 112, second paragraph, as allegedly indefinite for the reasons stated on pages 2 and 3 of the Action. The rejection is respectfully traversed.

Claim 11 claims a grid having the form of a web of vertically disposed plates. The web of plates comprises (a) a network of strands of plate segments connected by junctions, the strands terminating only at the periphery of the grid, and (b) one or more internal plate branches, each plate segment being joined at one end to a junction with at least two other plate segments and at the other end either being joined to a junction with at least two other plate segments or terminating at or near the periphery of the grid. The internal plate branch comprises a plate having a free end within the grid and being joined at one end thereof to a segment or to another branch, wherein in horizontal cross-section through the grid each segment has at least two angular portions, at least two curved portions or at least two angular and curved portions, which portions alternate in direction.

As will be clear from claim 11, the grid is made up of a "web of plates", the web comprising (a) "a network of strands of plate segments" and (b) "internal plate branches". In the "network of strands of plate segments", the plate segments are joined to form the "strands", the strands terminating only at the periphery of the grid. Each plate segment therefore is either connected to other plate segments at what is called a "junction" or forms the termination of the strand. As claimed, this termination can only be at or near the periphery of the grid. A further feature of claim 11 is that each junction joins at least three plate segments ("a junction with at least two other plate segments"). Other than the plate segments at the periphery of the grid (end of each strand), all plate segments therefore are connected to at least two other plate segments at both ends.

Also present are the above-mentioned "internal plate branches". These are plates having a free end within the grid. The plates therefore do not form part of the strands of plate segments, but are attached to the plate segments, either directly or via another internal plate branch. In other words, anything with a free end within the grid is an internal plate branch, not a plate segment, and *vice versa*.

The Action asserts that the terms "strands of plate segments terminating only at the periphery of the grid" and "each plate segment being joined at one end to a junction.. .and at the other end either being joined .. .or terminating at or near the periphery" are confusing. However, the language in the phrase referred to is "strands of plate segments connected by junctions, the said strands terminating only at the periphery of the grid" (emphasis added). Thus, it is clear that the termination of the strands, not the termination of all the plate segments, must be at the periphery of the grid. This is entirely consistent with the plate segments that form said strands being

able to be connected to other plate segments or terminating at the periphery (when they form the end of a strand). The wording of the claim is also believed to be clear that "segments" and "plate segments" refer to the segments making up the network of strands in part (a) of the claim, and that the "internal plate branches" of part (b) are distinct.

Withdrawal of the formal rejection is believed to be in order. Such action is respectfully requested.

III. THE ANTICIPATION REJECTION

Claims 11-14, 16-18 and 20-22 stand rejected under 35 §U.S.C. 102 (b) as allegedly anticipated by U.S. Patent 3,070,198 to Haskell. The rejection is respectfully traversed.

Haskell fails to show no internal plate branches having a free end within the grid. The Action references "the end at the internal juncture of cell 31", but it is not seen where this shows a "free end". There is a corner of one of the hexagons (11) in Figure 1, but this is not a "free **end**" (emphasis added).

It is clear that Haskell does not anticipate the invention as claimed. Withdrawal of the anticipation rejection is respectfully requested

IV. THE OBVIOUSNESS REJECTION

Claims 15, 19 and 23 stand rejected under 35 §U.S.C. 103 (a) as allegedly unpatentable over U.S. Patent 3,070,198 to Haskell. The rejection is respectfully traversed.

The present invention is directed to solving a different problem from that faced by Haskell. Thus, the present invention as claimed provides a grid having the form of a web of vertically disposed plates. The web comprises (a) a network of strands of plate segments connected by junctions, the strands terminating only at the periphery of the grid, and (b) one or more internal plate branches. Each plate segment is joined at one end to a junction with at least two other plate segments and at the other end is either joined to a junction with at least two other plate segments or terminates at or near the periphery of the grid. The internal plate branch comprises a plate having a free end within the grid and is joined at one end thereof to a segment or to another branch, wherein in horizontal cross-section through the grid, each segment has at least two angular portions, at least two curved portions or at least two angular and curved portions, which portions alternate in direction.

The grid of the present invention is particularly suitable for load-bearing applications (page 1 of the application). In particular, the grid possesses flexibility in the horizontal plane to accommodate thermal expansion, while exhibiting strength in the vertical plane for its load-bearing properties.

Haskell, on the other hand, addresses a different technical problem than the use to which the grid of the present invention is intended. Thus, Haskell relates to honeycomb structures suitable for use between skins or plates to form "sandwich type structures (col. 1, lines 26-30), or used without skins for ornamental (or combined ornamental and structural) purposes. While such structures generally provide structural strength, the object of Haskell is to provide honeycomb structures that can be expanded in two perpendicular axes so that they can be applied over curved surfaces, such as

dome shaped contours, to form tubes or for pipe or hose (col. 1, line 67 - col. 2, line 26). The Haskell structures are not designed for load bearing applications in which the grid has to withstand significant thermal expansion (any expansion in Haskell would appear only to be for formation of the grid initially, as described on col. 1, lines 13-25 of Haskell). Further, by definition, if the structures of Haskell are to be applied to curved surfaces, they must be able to be readily deformed in the vertical plane (in fact this is the object achieved by the improved flexibility of Haskell over prior art honeycomb structures).

Based on the above, it is clear that one of ordinary skill would not have been motivated to arrive at the present invention based on Haskell. Absent any such motivation, a *prima facie* case of obviousness has not been generated in this case. Withdrawal of the obviousness rejection is respectfully requested.

Favorable action is awaited.

Respectfully submitted,

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